

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012930**Date Inspected:** 05-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Listed below.**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girders (OBG)**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG L2E/L3E - plate E field splice welding
- 2) OBG L3E/L4E - plate D field splice welding

1) The QAI observed ABF personnel welding plate E at L2E/L3E field splice. The QAI noted that this complete joint penetration (CJP) weld is being made in segment C2 from 5270mm to 7900mm. The QAI noted that the Quality Control (QC) Inspector Bernie Docena is monitoring this welding. The QAI observed ABF workers Mitch Sittinger, ID 0315, and Song Tao Huang, ID 3794, making the welds with gas shielded flux cored arc welding (FCAW-G). Prior to the welding, the QC Inspector informed the QAI that the weld joint fit up was accepted. The QAI noted that the (above mentioned area of) weld joint fit-up appeared to be conforming to the contract requirements. The QAI was informed that welding procedure specification (WPS) ABF-WPS-D15-3040A-1 is being used for this welding. As the welding commenced, the QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. During the root pass welding, the QAI noted and was informed that the backing bar had separated from the base metal and would be re-positioned before the remaining root pass could be made. The QAI noted that additional fit-up aids were attached to the outside edge of the weld joint and are holding the backing bar in place. The QAI also noted that after welding the inside, this backing bar will be removed and the weld will be back gouged and back welded. The QC Inspector informed the QAI that the backing bar was fixed and that additional welding.

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This welding was in progress at the end of the QAI's shift.

2) The QAI observed ABF personnel welding at L3E/L4E bottom plate D field splice. The QAI noted that Chun Fai Tsui, ID 3426, is welding segment D1 from 0mm to 800mm and that James Zhen, ID 6001, is welding segment D2 from 7000mm to 8500mm. The QAI observed that shielded metal arc welding (SMAW) was utilized for making the root / tie-in passes to the base metal and backing bar and that FCAW-G is being used the weld out the remainder. The QAI noted that the QC Inspector Tom Pasqualone is monitoring this welding. The QAI was informed that ABF-WPS-D15-3040A-1 is being used for this welding. The QAI randomly measured the preheat, interpass temperature and welding parameters and noted that they appeared to be conforming to the WPS requirements. This welding was in progress at the end of the QAI's shift. The QAI Danny Reyes arrived and assumed the QA duties at this location.

Summary of Conversations:

As noted above, the QAI had conversations with the QC Inspector Bernie Docena regarding backing bar and it's fit-up. The QAI had other general conversations with the QC Inspectors regarding the observed work in progress. The QAI relayed the observations of OBG splice welding to the QAI Danny Reyes and the QAI Lead Bill Levell. The QAI also generated a shift turn-over report with this information. There were no other notable observations or conversations during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi, (916)813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Croff, Scott	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
